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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,841	02/02/2007	Edwin Nun	278280US0PCT	5826
22850 7590 04/01/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER CHOI, FRANK I				
ART UNIT 1616		PAPER NUMBER		
NOTIFICATION DATE 04/01/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
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### Office Action Summary

**Application No.**

10/551,841

**Applicant(s)**

NUN ET AL.

**Examiner**

FRANK I. CHOI

**Art Unit**

1616

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to because the shading is such that the details of the drawing are obscured. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

Claims 14-26, 37, 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 on which claims 15-26, 37 and 38 are directly dependent appears to limit the surface treated to stone, brick, plaster surface, sandwich type plaster board, joints, paper-based

wall papers or mineral paint. A plastic surface is not an option. Claim 18 then claims application to a plastic surface. It is unclear how the claims can include a plastic surface when the claims appear to exclude other surfaces than that specifically claimed in claim 14.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent,
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States,
- (f) he did not himself invent the subject matter sought to be patented.

Claims 27-30, 35, 39, 40 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 8-165208.

JP 8-165208 expressly disclose a spray composition containing 1% titanium dioxide having a mean particle diameter of 21 nm in ethanol which is used to mildewproof a plastic pipe material (Paragraphs 0020-0025).

The Examiner has duly considered the Applicant's arguments but deems them unpersuasive.

The claims are directed to a composition not a method of use. As such, the language directed to methods of using the composition do not patentably distinguish the claims from the prior art composition.

Claims 27, 30-36, 39, 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Keller et al. (US Pat. 2002/0016433).

Keller et al. expressly disclose coating of a glass plate with polytetrafluoroethylene powder having a particle size of 1 micron and specific BET surface area of 8.01 m<sup>2</sup>/g

(manufacture:Aldrich) in poly isobutene and spirit, wherein the spirit is evaporated resulting in a coat that is no longer wetted by water and coating of wooden board with 6.37 g of Aerosil ® R812S dispersed in 900.9 g of spirit and 2.73 g of polyisobutene which is sprayed and after drying the coat is no longer wetted by water (paragraphs 0110-0116).

Aspect ratio and irregular fine structures are inherent properties of particles and in view of the surface area of the particles it is inherent that the particles used in the prior art do have irregular fine structures which would fall within the claimed range of 1 m to 1000 nm and elevations having aspect ratios of greater than 1.

The Examiner has duly considered the Applicant's arguments but deems them unpersuasive.

The claims are directed to a composition not a method of use. As such, the language directed to methods of using the composition do not patentably distinguish the claims from the prior art composition.

Claims 35, 36 are rejected under 35 U.S.C. 102(a or b) as being anticipated by Nun et al.

Nun et al. discloses a self-cleaning Lotus-Effect® surface on Plexiglas® made up of hydrophobic nanoparticles having a diameter less than 500 nm (pages 679, 680, figure 3).

Aspect ratio and irregular fine structures are inherent properties of particles and in view of SEM image (Fig. 3), it is inherent that the particles used in the prior art do have irregular fine structures which would fall within the claimed range of 1 m to 1000 nm and elevations having aspect ratios of greater than 1.

Applicant cannot rely upon the foreign priority papers to overcome the 102(b) rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

With respect to the 102(a) rejection, since Nun et al. lists authors not identified as inventors herein, the same constitutes a different inventive entity.

The Examiner has duly considered the Applicant's arguments but deems them unpersuasive.

The claims are directed to a composition not a method of use. As such, the language directed to methods of using the composition do not patentably distinguish the claims from the prior art composition.

Claim 35, 36 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. See rejection over Nun et al. above.

The Examiner has duly considered the Applicant's arguments but deems them unpersuasive.

The claims are directed to a composition not a method of use. As such, the language directed to methods of using the composition do not patentably distinguish the claims from the prior art composition.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a compressed schedule and may be reached Monday, Tuesday, Wednesday and Thursday, 6:00 am – 4:30 pm (EST).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Johann R. Richter, can be reached at (571)272-0646. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank Choi  
Patent Examiner  
Technology Center 1600  
April 1, 2010

/Johann R. Richter/  
Supervisory Patent Examiner, Art Unit 1616